

## Description

### METHOD AND APPARATUS FOR TRANSMITTING POSITION INFORMATION ON A DIGITAL MAP

MIM 5 This patent application is a continuation of U.S. Serial  
No. 10/169,639 filed July 3, 2002, now U.S. Patent No. 6,662,101 which is  
a 371 of PCT/JP02/00601 filed January 28, 2002.  
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<Technical Field>

The present invention relates to a method for transmitting  
position information on a digital map and apparatus for implementing  
the method, and in particular to a method and apparatus for accurately  
10 transmitting position information on a digital map by using only  
a small amount of data.

#### <Background of the Invention>

In recent years, the number of vehicles that have on-board  
15 navigation apparatus has been increasing rapidly. The on-board  
navigation apparatus maintains a digital map database and is capable  
of displaying traffic congestion and traffic accident positions  
on the map based on traffic congestion information and traffic  
accident information provided by a traffic information center as  
20 well as performing a route search using conditions including the  
aforementioned information.

In Japan, digital map databases are prepared by several  
companies. The problem is that map data contains errors due to  
the different base maps and digitizing technologies. The error